(*a*) Intramuscularly at the rate of 1 cubic centimeter per 40 pounds of body weight in conjunction with atropine sulfate administered at the rate of 0.02 milligram per pound of body weight and followed in 10 minutes by an intravenous administration of sodium pentobarbital at the rate of 3 milligrams per pound of body weight, or

(*b*) Intravenously at the rate of 1 cubic centimeter per 25 to 60 pounds of body weight in conjunction with atropine sulfate administered at the rate of 0.02 milligram per pound of body weight and followed within 15 seconds by an intravenous administration of sodium pentobarbital at the rate of 3 milligrams per pound of body weight.

(3) For use only by or on the order of a licensed veterinarian.

§ 522.812 Enrofloxacin solution.

(a) *Specifications.* Each milliliter of sterile aqueous solution contains 22.7 milligrams of enrofloxacin.

(b) *Sponsor.* See No. 000859 in § 510.600(c) of this chapter.

(c) *Conditions of use*—(1) *Amount.* 2.5 milligrams per kilogram (1.13 milligrams per pound) of body weight as an initial dose only.

(2) *Indications for use.* Dogs for treatment of the following bacterial infections: dermal infections (wounds and abscesses) caused by susceptible strains of *Escherichia coli, Klebsiella pneumoniae, Proteus mirabilis,* and *Staphylococcus aureus*; respiratory infections (pneumonia, tonsillitis, rhinitis) caused by susceptible strains of *Escherichia coli* and *Staphylococcus aureus*; and urinary cystitis caused by susceptible strains of *Escherichia coli, Proteus mirabilis,* and *Staphylococcus aureus.*

(3) *Limitations.* As a single, intramuscular, initial dose followed by use of tablets twice daily for 2 to 3 days beyond cessation of clinical signs to a maximum of 10 days. Federal law restricts this drug to use by or on the order of a licensed veterinarian.

[55 FR 26683, June 29, 1990]

§ 522.820 Erythromycin injection.

(a) *Sponsor.* See 050604 in § 510.600(c) of this chapter.

(b) *NAS/NRC status.* The conditions of use have been reviewed by NAS/NRC and found effective.

(c) *Dogs and cats*—(1) *Specifications.* Each milliliter of polyethylene glycol vehicle contains 100 milligrams of erythromycin base with 2 percent butyl aminobenzoate.

(2) *Conditions of use*—(i) *Amount.* 3 to 5 milligrams per pound of body weight, intramuscularly, two to three times daily, for up to 5 days.

(ii) *Indications for use*—(A) *Dogs.* For the treatment of bacterial pneumonia, upper respiratory infections (tonsillitis, bronchitis, tracheitis, pharyngitis, pleurisy), endometritis and metritis, and bacterial wound infections caused by *Staphylococcus* spp., *Streptococcus* spp., and *Corynebacterium* spp., sensitive to erythromycin.

(B) *Cats.* For the treatment of bacterial pneumonia, upper respiratory infections (rhinitis, bronchitis), secondary infections associated with panleukopenia, and bacterial wound infections caused by *Staphylococcus* spp. and *Streptococcus* spp., susceptible to erythromycin.

(iii) *Limitations.* Administer by deep intramuscular injection into the heavy muscles of the neck and limbs. Do not administer intravenously or intraperitoneally. Avoid subscutaneous use. Do not administer from moist or wet syringe. As with all antibiotics, appropriate in vitro culturing and susceptibility testing of samples taken before treatment should be conducted. Do not administer in conjunction with penicillin. As with all antibiotics, excessive continuous use may result in an overgrowth of nonsusceptible organisms. Federal law restricts this drug to use by or on the order of a licensed veterinarian.

(d) *Cattle.*—(1) *Specifications.* Each milliliter of nonaqueous, buffered, alcohol base sterile solution contains 200 milligrams of erythromycin base.

(2) *Related tolerances.* See § 556.230 of this chapter.

(3) *Conditions of use*—(i) *Amount.* 4 milligrams of erythromycin base per pound of body weight once daily for up to 5 days.

(ii) *Indications for use.* For the treatment of bovine respiratory disease (shipping fever complex and bacterial

pneumonia) associated with *Pasteurella multocida* susceptible to erythromycin.

(iii) *Limitations.* For intramuscular use only. Do not use in female dairy cattle over 20 months of age. Do not slaughter treated animals within 6 days of last treatment. To avoid excess trim, do not slaughter within 21 days of last injection.

[58 FR 43795, Aug. 18, 1993]

§ 522.840 Estradiol.

(a) *Specifications.* Each silicone rubber implant contains 25.7 or 43.9 milligrams of estradiol.

(b) *Sponsor.* See 000986 in § 510.600(c) of this chapter.

(c) *Conditions of use.* It is used for implantation in steers and heifers as follows:

(1) *Amount.* Insert one 25.7-milligram implant every 200 days; insert one 43.9-milligram implant every 400 days.

(2) *Indications for use.* For increased rate of weight gain in suckling and pastured growing steers; for improved feed efficiency and increased rate of weight gain in confined steers and heifers.

(3) *Limitations.* For subcutaneous ear implantation in steers and heifers only. A second implant may be used if desired. No additional effectiveness may be expected from reimplanting in less than 200 days for the 25.7-milligram implant or 400 days for the 43.9 milligram implant. Increased sexual activity (bulling, riding, and excitability) has been reported in implanted animals.

[51 FR 22276, June 19, 1986, as amended at 57 FR 41861, Sept. 14, 1992]

§ 522.842 Estradiol benzoate and testosterone propionate in combination.

(a) *Chemical names.* (1) Estradiol benzoate: 1,3,5(10)-Estratriene-3,17 beta-diol 3-benzoate.

(2) Testosterone propionate: 17beta-Hydroxyandrost-4-en-3-one propionate.

(b) *Sponsor.* See Nos. 000856 and 021641 in § 510.600(c) of this chapter.

(c) *Related tolerances.* See §§ 556.240 and 556.710 of this chapter.

(d) *Conditions of use.* It is used for implantation in heifers as follows:

(1) *Amount.* 20 milligrams of estradiol benzoate and 200 milligrams of testosterone propionate per dose.

(2) *Indications for use.* Growth promotion and improved feed efficiency.

(3) *Limitations.* For heifers weighing 400 pounds or more; for subcutaneous ear implantation, one dose per animal; not for use in dairy or beef replacement heifers.

(e) *NAS/NRC status.* These conditions are NAS/NRC reviewed and deemed effective. Applications for these uses need not include effectiveness data as specified by § 514.111 of this chapter, but may require bioequivalency and safety data.

[40 FR 13858, Mar. 27, 1975, as amended at 49 FR 29778, July 24, 1984; 61 FR 5506, Feb. 13, 1996]

§ 522.850 Estradiol valerate and norgestomet in combination.

(a) *Specifications.* The product is a two-component drug consisting of the following:

(1) An implant containing 6.0 milligrams of norgestomet.

(2) An injectable solution (sesame oil) containing 3.0 milligrams of norgestomet and 5.0 milligrams of estradiol valerate per 2 milliliters.

(b) *Sponsor.* See 050604 in § 510.600(c) of this chapter.

(c) *Conditions of use*—(1) *Amount.* One implant and 2 milliliters of injection at time of implantation.

(2) *Indications for use.* For synchronization of estrus/ovulation in cycling beef cattle and non-lactating dairy heifers.

(3) *Limitations.* Insert implant subcutaneously in the ear only; then immediately inject solution intramuscularly only. Counting the day of implantation as day 1, remove the implant on day 10. Collect all implants as they are removed and burn them. While animals are restrained for artificial insemination, avoid other treatments such as vaccinations, dipping, pour-on grub and louse prevention, spraying, etc. When inseminating without estrus detection, the entire treated group should be started at 48 hours after the last implant has been removed and should be completed within 6 hours. Where estrus detection is preferred, insemination should be approximately 12 hours after first detection of estrus. Those that do not conceive can be re-bred when they return